

**IN THE CLAIMS:**

**1. (currently amended)** An activation method of a communications apparatus that ~~have~~ has both a feedback loop and a non-linear distortion compensation device with a function to generate/update a distortion compensation coefficient, comprising:

- (a) opening the feedback loop;
- (b) adjusting both a level and a phase of an analog signal of the communications apparatus;
- (c) closing the feedback loop; and
- (d) generating/updating the distortion compensation coefficient.

**2. (original)** The activation method according to claim 1, further comprising:

- (e) activating a digital section of said communications apparatus prior to step (a);
- and
- (f) activating an analog section of said communications apparatus between steps (a) and (b).

**3. (currently amended)** The activation method according to claim 1 ~~17~~, wherein said step of adjusting the level of an analog signal offsets a level adjustment is made to ~~offset~~ gain of an amplifier for amplifying a signal in order to transmit radio waves of said communications apparatus.

**4. (currently amended)** The activation method according to claim 1 ~~17~~, wherein said step of adjusting the phase of an analog signal adjusts an ~~phase adjustment is made~~

to ~~adjust~~ analog signal delay that is caused in the analog section of said communications apparatus and to ~~match~~ matches in timing a signal transmitted via a feedback loop with a signal directly inputted to said non-linear distortion compensation device.

**5. (currently amended)** The activation method according to claim 4 17, wherein said communications apparatus conducts multi-carrier transmission, said activation method, further comprising

(g) adjusting both amplitude and phase of a signal for each carrier.

**6. (original)** The activation method according to claim 5, wherein step (b) is performed using a central frequency of a band occupied by the plurality of carriers as a whole.

**7. (currently amended)** The activation method according to claim 4 17, wherein said generation/update of a distortion compensation coefficient is made using a test signal.

**8. (currently amended)** The activation method according to claim 4 17, wherein said communications apparatus is composed of a plurality of transmitting systems, forms a feedback loop by sequentially switching the plurality of transmitting systems and generates/updates the distortion compensation coefficient.

9. **(currently amended)** The activation method according to claim 4 17, wherein a plurality of generation/update steps of the distortion compensation coefficient can be set.

10. **(original)** The activation method according to claim 9, wherein the generation/update step of the distortion compensation coefficient is set to a minimum and a level of a signal to be used to generate/update the distortion compensation coefficient is changed in multi-steps from the minimum value and the distortion compensation coefficient is generated/updated by gradually increasing the level.

11. **(currently amended)** The activation method according to claim 4 17, wherein a value measured in advance is used as an initial value for said generation/update of a distortion compensation coefficient.

12. **(currently amended)** An activation method of a communications apparatus that has both a feedback loop and a non-linear distortion compensation device with a function to generate/update a distortion compensation coefficient, comprising:

(a) opening the feedback loop;

(b) adjusting both a level and a phase of an analog signal of the communications apparatus;

(c) closing the feedback loop; and

(d) generating/updating the distortion compensation coefficient;

~~The activation method according to claim 1~~, wherein all coefficients are set to  $1+j0$  ( $j$  is the imaginary unit) as an initial value for said generation/update of a distortion compensation coefficient.

**13. (currently amended)** The activation method according to claim 1 17, wherein convergence of a generation/update process of the distortion compensation coefficient is judged by detecting size of a difference signal between a signal directly inputted to said non-linear distortion compensation device and a signal which is transmitted via said feedback loop and the level of which is adjusted.

**14. (currently amended)** The activation method according to claim 1 17, wherein convergence of a generation/update process of the distortion compensation coefficient is judged by detecting an out-of-band radiation level of a signal immediately before being transmitted from said transmitting unit.

**15. (currently amended)** The activation method according to claim 1 17, wherein if said non-linear distortion compensation device is switched off and is switched on again, a value immediately before said non-linear distortion compensation device is switched off is used as an initial value for said level adjustment and phase adjustment processes in step (b).

**16. (currently amended)** The activation method according to claim 1 17, wherein a transmitting side of said communications apparatus comprises an antenna and a signal

termination unit with the same impedance as that of the antenna, and generates/updates the distortion compensation coefficient while terminating a signal used to generate/update the distortion compensation coefficient at the signal termination unit.

**17. (new)** An activation method of a communications apparatus that has both a feedback loop and a non-linear distortion compensation device with a function to generate/update a distortion compensation coefficient, comprising:

- (a) opening the feedback loop;
  - (b) adjusting both a level and a phase of an analog signal of the communications apparatus;
  - (c) closing the feedback loop;
  - (d) generating/updating the distortion compensation coefficient;
  - (e) activating a digital section of said communications apparatus prior to step (a);
- and
- (f) activating an analog section of said communications apparatus between steps (a) and (b).